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No. 247—Fifth Edition.

LIST OF

BULLETINS AND CIRCULARS

ISSUED BY THE

U. S. DEPARTMENT OF AGRICULTURE

AND

AVAILABLE FOR FREE DISTRIBUTION.

CORRECTED TO APRIL 1, 1900.

United States Department of Agriculture,

DIVISION OF PUBLICATIONS.

Washington, D. C., March 1, 1900.

Note.—Copies of the publications in the accompanying list will be sent free, so long as the editions permit, on application to the Secretary of Agriculture, Washington, D. C.

The Farmers' Bulletins and Circulars of Information issued by the U. S. Department of Agriculture are printed in large editions and are for free distribution, the object being to supply farmers and others interested in agriculture and kindred subjects with condensed and practical information. It is expected, however, that applicants will ask for only such publications as are likely to be of special interest to them, and not with a view to getting complete sets, which might embrace certain bulletins or circulars of no use to them but which would be of great value to some one else. If applicants will bear this fact in mind, they will greatly aid the Department in its effort to make the widest and at the same time the most useful distribution of its publications.

BULLETINS AND CIRCULARS FOR FREE DISTRIBUTION.

FARMERS' BULLETINS.

No. 16.—Leguminous Plants for Green Manuring and for Feeding. Pp. 24.

CONTENTS: Green manuring—How plants get nitrogen from the air—Some crops for green manuring—Composition of green leguminous crops—Green manuring compared with feeding the crops—Alfalfa and crimson clover for feeding—Cowpeas for feeding—Advantages of soiling—Value of leguminous crops for feeding.

No. 19.—Important Insecticides: Directions for Their Preparation and Use. Pp. 32.

Contents: Relation of food habits to remedies—Insecticides for external biting insects (food poisons)—Insecticides for external sucking insects (contact poisons)—Dusting and spraying apparatus—Remedies for subterranean insects—Remedies for insects affecting grain and other stored products—Control of insects by cultural methods—Profit in remedial measures.

No. 21.—Barnyard Manure. Pp. 32, figs. 7.

Contents: Manure as a farm resource—Amount, value, and composition of manures produced by different animals—Influence of age and kind of animal, of quality and quantity of food, of the nature and proportion of litter—Management and use of manure—Lasting or cumulative effect of barnyard manure.

No. 22.—The Feeding of Farm Animals. Pp. 32.

Contents: Principles of feeding—Composition of the animal body—Composition and digestibility of feeding stuffs—Feeding standards for different kinds of animals—Calculation of rations—Selection of feeding stuffs—Preparation of food for animals—Feeding for fat and for lean—Wheat as a food for animals—Table showing composition of feeding stuffs.

No. 23.—Foods: Nutritive Value and Cost. Pp. 32, charts 2.

Contents: Nutriment in food and how it is used in the body—Chemical composition of food materials—The fuel value of food—Definition of food and food economy—Nutritive value of different food materials—Digestibility of food—Calculation of daily dietaries—Pecuniary economy of food—Food and health.

No. 24.—Hog Cholera and Swine Plague. Pp. 16.

Contents: General characters—Symptoms—Appearance on post-mortem examination—The cause of these diseases—Diagnosis and prognosis—Formula for remedy for hog cholera and swine plague—Sanitary measures to prevent the introduction of hog cholera and swine plague—Prevention of disease by proper breeding and feeding.

No. 25.—Peanuts: Culture and Uses. Pp. 24, fig. 1.

Contents: Description and history—Composition—Varieties—Climate and soil suitable for peanut culture—Manuring—Culture—Harvesting—Uses.

No. 26.—Sweet Potatoes: Culture and Uses. Pp. 30, figs. 4.

Contents: Propagation—Character and preparation of soil—Transplanting—Cultivation—Manuring—Harvesting and storing—Varieties—Fungous diseases and insect enemies—Uses—Cost of production.

No. 27.—Flax for Seed and Fiber in the United States. Pp. 16.

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No. 28.—Weeds: And How to Kill Them. Pp. 32, figs. 11.

Contents: General methods of eradicating weeds—List of weeds attracting special attention during 1894—Table of one hundred weeds.

No. 29.—Souring of Milk and Other Changes in Milk Products. Pp. 23.

Contents: Composition of milk—Causes of fermentation—Sources, number, and kinds of dairy bacteria—The souring of milk—Supposed effect of thunderstorms—Other forms of fermentation—Fermentation of milk by rennet.

No. 30.—Grape Diseases on the Pacific Coast. Pp. 15, figs. 3. Contents: California vine disease—Powdery mildew—Coulure.

No. 31.—Alfalfa, or Lucern. Pp. 24, figs. 3.

Contents: Name—History—Description—Varieties—Habits of growth—Preparation of the soil—Sowing the seed—Alfalfa hay—Feeding value—Soiling vs. pasturing—Alfalfa for hogs—Alfalfa in the orchard—Chemical composition—Alfalfa as a soil renovator—Destroying alfalfa—Enemies of alfalfa.

No. 32.—Silos and Silage. Pp. 32. figs. 10.

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No. 33.—Peach Growing for Market. Pp. 24, figs. 20.

Contents: Where peaches can be grown—Planting within easy reach of large markets—Extent of peach lands in the United States—Planting and cultivation of the orchard—Pruning—Fertilizers—Fungous diseases and insect pests—Spraying, washing, etc.—Picking and marketing the fruit—Gluts in the market—Hindrances to profitable peach culture.

No. 34.—Meats: Composition and Cooking. Pp. 29, figs. 4.

Contents: Animal and vegetable foods compared—Structure, composition, texture (toughness), flavor, and digestibility of meats—The cooking of meats—Cuts of meat—Fuel value of meats.

No. 35.—Potato Culture. Pp. 24, figs. 3.

Contents: Soil and rotation—Manuring—Varieties—Time to cut seed potatoes—Quantity of seed potatoes per acre—Weight and number of eyes per set—Number of cuttings and stalks per hill—Cultivation—Mulching—Harvesting and storing—Second-crop potatoes.

No. 36.—Cotton Seed and Its Products. Pp. 16.

Contents: Cotton seed—Method of manufacturing cotton-seed products—Cotton-seed oil, meal, and hulls—Cotton-seed-hull ash—Feeding cotton-seed products to farm stock—Effect on health of animals.

No. 37.—Kafir Corn: Characteristics, Culture, and Uses. Pp. 12, fig. 1.

Contents: Characteristics, culture, and uses—Varieties—Soils and climate—Preparation of the soil—Methods of seeding—Cultivation and harvesting—Yield—Composition—Practical feeding tests.

No. 38.—Spraying for Fruit Diseases. Pp. 12, figs. 6.

Contents: Fungicides, or remedies for plant diseases—Applying fungicides—Treatment of grape, apple, pear, quince, cherry, and plum diseases.

No. 39.—Onion Culture. Pp. 31, figs. 3.

Contents: Selection and preparation of soil—Fertilizing—Seed and varieties—Growing onions from sets and from seed sown in the field—Transplanting—Cultivation and weeding—Irrigation—Harvesting—Storing—Production of seed—two important enemies of the onion.

No. 40.—Farm Drainage. Pp. 24, figs. 6.

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No. 41.—Fowls: Care and Feeding. Pp. 24, figs. 4.

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No. 42.—Facts about Milk. Pp. 29, figs. 8.

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No. 43.—Sewage Disposal on the Farm and the Protection of Drinking Water. Pp. 20, figs. 8.

Contents: Methods of disposal of different kinds of sewage—Protection of drinking water—Ways of contamination of water—Construction of wells.

No. 44.—Commercial Fertilizers: Composition and Use. Pp. 24.

Contents: The need of commercial fertilizers—Fertilizer requirements of different soils and crops—Forms, sources, and composition of fertilizing materials—Agricultural vs. commercial value of fertilizers—Purchase of fertilizers and conditions when they may be properly used—Kind to use—How to apply.

No. 45.—Some Insects Injurious to Stored Grain. Pp. 24, figs. 17.

Contents: Grain weevils—Grain moths—Flour and meal moths—Flour beetles—Meal worms—Grain beetles—The cadelle—Parasites and natural enemies—Methods of control: Preventive measures; insecticides and other destructive agencies; the bisulphide of carbon treatment; summary of principal remedies.

No. 46.—Irrigation in Humid Climates. Pp. 27, figs. 4.

Contents: The advantages of an abundant supply of soil moisture—The rainfall of the growing season in the United States is insufficient for maximum yield—Extent of irrigation in the humid parts of Europe—The rainfall of Europe and the Eastern United States compared—Fertilizing value of irrigation waters—Lands best suited to irrigation in humid climates—Methods of obtaining water for irrigation—The construction of reservoirs—Methods of applying irrigation water.

No. 47.—Insects Affecting the Cotton Plant. Pp. 32, figs. 18.

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No. 48.—The Manuring of Cotton. Pp. 16.

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No. 50.—Sorghum as a Forage Crop. Pp. 20, fig. 1.

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No. 51.—Standard Varieties of Chickens. Pp. 48, figs. 42.

Enumerates, describes, and illustrates forty-four varieties of barnyard fowls, popularly called chickens, and recites their respective points of superiority and general utility.

No. 52.—Sugar Beet. Pp. 48, figs. 24.

Contents: Climatic conditions affecting the growth of the sugar beet—The theoretical beet-sugar belt of the United States—Growth of beets on irrigated lands—Varieties of beets—Soils—Fertilization—Precautions to be observed in applying stable manure—Preparation of the land for planting—Planting—Cultivation—Cost of growing beets—Harvesting—Siloing—Domestic production of beet seed—Comparative value of domestic and foreign grown seed—Manufacture of sugar—Home consumption of sugar—Waste products—Cost of manufacture—Cost of factory—Cooperative factories—Statistical.

No. 53.—How to Grow Mushrooms. Pp. 20, figs. 14.

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No. 54—Some Common Birds in Their Relation to Agriculture. Pp. 40, figs. 14.

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No. 55—The Dairy Herd: Its Formation and Management. Pp. 24.

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No. 96.—Raising Sheep for Mutton. Pp. 48, figs. 18.

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No. 106.—Breeds of Dairy Cattle. Pp. 48, figs. 21.

Gives names, numbers, history, descriptions, and illustrations of all the principal breeds of dairy cattle in the United States.

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DIVISION OF AGROSTOLOGY.

[See also Division of Botany.]

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Circular No. 13.—Florida Beggar Weed. Pp. 5, figs. 2.

Circular No. 14.—The Velvet Bean. Pp. 5, figs. 3.

Circular No. 15.—Recent additions to Systematic Agrostology. Pp. 10, figs. 5.

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Circular No. 17.—Crimson Clover. Pp. 6, fig. 1.

Circular No. 18.—Smooth Brome Grass. Pp. 9, figs. 2.

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Circular No. 22.—Grass and Forage-Plant Investigations on the Pacific Coast. Pp. 7.

BUREAU OF ANIMAL INDUSTRY.

Circular No. 1.—Directions for Pasteurization of Milk. P. 1, figs. 2.

Circular No. 2.—Wheat as a Food for Growing and Fattening Animals. Pp. 4.

Circular No. 3.—Nodular Tæniasis of Fowls. Pp. 4.

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This circular discusses the nature of the disease sometimes called blackhead.

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Circular No. 21.—Directions for Use of Blackleg Vaccine. Pp. 8, figs. 2.

Circular No. 22.—List of Officers and Associations Connected with the Dairy Interests of the United States and Canada for 1898. Pp. 8.

Circular No. 23.—Blackleg: Its Nature, Cause, and Prevention. Pp. 12, figs. 2.

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DIVISION OF BIOLOGICAL SURVEY.

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Circular No. 13.—Observations on Recent Cases of Mushroom Poisoning in the District of Columbia. Pp. 24, figs. 27.

Circular No. 14.—Dodders Infesting Clover and Alfalfa. Pp. 7, figs. 2.

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DIVISION OF CHEMISTRY.

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Circular No. 2.—The Hop Plant Louse and the Remedies to be used against It. Pp. 7, pl. 1, figs. 5.

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Circular No. 5.—The Carpet Beetle, or "Buffalo" Moth. Pp. 4, fig. 1.

Circular No. 7.—The Pear Tree Psylla. Pp. 8, figs. 6.

Circular No. 8.—The Imported Elm Leaf Beetle. Pp. 4, fig. 1.

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Circular No. 10.—The Harlequin Cabbage Bug, or Calico Back. Pp. 2, fig. 1.

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Circular No. 13.—Mosquitoes and Fleas. Pp. 4.

Circular No. 14.—The Mexican Cotton-boll Weevil. Pp. 8, figs. 5. [Revision of Circular No. 6, printed in two editions, English and Spanish.]

Circular No. 16.—The Larger Corn Stalk Borer. Pp. 3, figs. 3.

Circular No. 17.—The Peach Tree Borer. Pp. 4, fig. 1.

Circular No. 18.—The Mexican Cotton-boll Weevil. Pp. 8, figs. 5. [Revised edition of No. 14, printed in two editions, English and Spanish.]

Circular No. 19.—The Clover Mite. Pp. 4, fig. 1.

Circular No. 20.—The Woolly Aphis of the Apple. Pp. 6, figs. 2.

Circular No. 21.—The Strawberry Weevil. Pp. 7, figs. 4.

Circular No. 23.—The Buffalo Tree-hopper. Pp. 4, figs. 2.

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Circular No. 35.—House Flies. Pp. 8, figs. 6.

Circular No. 36.—The True Clothes Moth. Pp. 8, figs. 3.

Circular No. 37.—The Use of Hydrocyanic Acid Gas for Fumigating Greenhouses and Cold Frames. Pp. 10, figs. 3.

Circular No. 38.—The Squash-vine Borer. Pp. 6, figs. 2.

Circular No. 39.—The Common Squash Bug. Pp. 5, figs. 3.

Circular No. 40-—How to Distinguish the Different Mosquitos of America. Pp. 7, figs. 3.

OFFICE OF EXPERIMENT STATIONS.

Circular No. 25.—Canaigre. Pp. 4, fig. 1.

Circular No. 27.—Statistics of Agricultural Colleges and Experiment Stations. Pp. 18.

Circular No. 28.—Broom Corn. Pp. 4.

Circular No. 32.—Methods of Teaching Agriculture [first report]. Pp. 20.

Circular No. 33.—Civil Service in the Department of Agriculture. Pp. 10.

Circular No. 37.—Methods of Teaching Agriculture [second report]. Pp. 4.

Circular No. 38.—Some Books on Agriculture and Sciences Related to Agriculture, Published 1896–1898. Pp. 45.

- Circular No. 39.—Methods of Teaching Agriculture [third report]. Pp. 7.
- Circular No. 40.—Land-Grant and Other Colleges and the National Defense. Pp. 15.
- Circular No. 41.—Methods of Teaching Agriculture [fourth report]. Pp. 7.
- Circular No. 42.—A German Common School with a Garden. Pp. 7, figs. 3.
- Circular No. 43.—Food—Nutrients—Food Economy. Pp. 6, diags. 2.
- Agricultural Education in Scandinavia and Finland. Pp. 15, figs. 4. (Reprinted from Experiment Station Record.)
- Agriculture Associations in Belgium. Pp. 21. (Reprinted from Experiment Station Record.)
- List of Publications of the Office of Experiment Stations on the Food and Nutrition of Man.

SECTION OF FOREIGN MARKETS.

- Circular No. 2.—American Dried Apples in the German Empire. Pp. 3.
- Circular No. 7.—Extension of Markets for American Feed Stuffs. Pp. 8.
- Circular No. 8.—The Manchester District of England as a Market for American Products. Pp. 8, fig. 1.
- Circular No. 9.—Imports and Exports for 1893–1896. Pp. 9.
- Circular No. 10.—Course of Wheat Production and Exportation in the United States, Canada, Argentina, Uruguay, Russia, and British India from 1880 to 1896. Pp. 8.
- Circular No. 12.—Sources of the Principal Agricultural Imports of the United States During the Five Years Ended June 30, 1896. Pp. 24.
- Circular No. 13.—Distribution of the Principal Agricultural Exports of the United States During the Five Years Ended June 30, 1896. Pp. 24.
- Circular No. 14.—Hamburg as a Market for American Products. Pp. 10.
- Circular No. 15.—Exports of Cotton from Egypt. Pp. 7.
- Circular No. 16.—Our Trade with Cuba from 1887 to 1897. Pp. 30.
- Circular No. 17.—United States Wheat in Eastern Asia. Pp. 8.
- Circular No. 18.—Hawaiian Commerce from 1887 to 1897. Pp. 37.
- Circular No. 19.—Austria-Hungary as a Factor in the World's Grain Trade; Recent Use of American Wheat in That Country. Pp. 23.
- Circular No. 20.—Agricultural Imports and Exports, 1893–1897. Pp. 15.
- Circular No. 21.—Agricultural Imports and Exports, 1894–1898. Pp. 16.

DIVISION OF FORESTRY.

Circular No. 10.—Suggestions to the Lumbermen of the United States in Behalf of More Rational Forest Management. Pp. 8.

Circular No. 12.—Southern Pine: Mechanical and Physical Properties. Pp. 12, figs. 4. [Quarto.]

Circular No. 15.—Summary of Mechanical Tests on Thirty-two Species of American Woods. Pp. 12.

Circular No. 18.—Progress in Timber Physics. Pp. 20, diags. 11.

Circular No. 19.—Progress in Timber Physics. Bald Cypress. Pp. 24.

Circular No. 20.—Increasing the Durability of Timber. Pp. 5.

Circular No 21.—Practical Assistance to Farmers, Lumbermen, and Others in Handling Forest Lands. Pp. 5.

Circular No. 22.—Practical Assistance to Tree Planters. Pp. 11, figs. 5.

DIVISION OF GARDENS AND GROUNDS.

Circular No. 1.—An Experiment in Tea Culture. Pp. 10.

DIVISION OF POMOLOGY.

Circular No. 3.—Notes on Peach Culture. Pp. 10, figs. 4.

DIVISION OF PUBLICATIONS.

Circular No. 179.—List of Publications of the Department of Agriculture for Sale by the Superintendent of Documents. Pp. 28. (Revised and corrected to February 1, 1900.)

Circular No. 218.—The Publication Work of the Department of Agriculture as Affected by the Law of January 12, 1895. Pp. 4.

Circular No. 247.—List of Farmers' Bulletins and Circulars of Information Available for Distribution. Pp. 20. (Revised and corrected to April 1, 1900.)

Monthly List of Publications.

This list is issued on the last day of each month and contains the titles of all publications issued by the Department of Agriculture during the month. The Monthly List is mailed regularly to all persons who request to have their names enrolled for that purpose.

OFFICE OF ROAD INQUIRY.

Circular No. 14.—Addresses on Road Improvement. Pp. 15.

Circular No. 15.—An Act to provide for the Construction of Roads by Local Assessment, County and State Aid. Pp. 3.

Circular No. 17.—Origin and work of the Darlington Road League. Pp. 6.

Circular No. 18.—Report of Committee on Legislation, adopted by the State Good Roads Convention held in Richmond, Va., October 10 and 11, 1895. Pp. 6. Circular No. 19.—Traffic on the Country Roads. Opinions of Representative Men. Pp. 4.

Circular No. 20.—Comments on Systems of Maintaining Country Roads. Pp. 7.

Circular No. 21.—Methods of Constructing Macadamized Roads. Pp. 12.

Extract from a report prepared by the Chief Engineering Inspector of the Local Government Board of Great Britain.

Circular No. 22.—Appeal for State Organization in Tennessee. Pp. 3.

Circular No. 23.—Money Value of Good Roads to Farmers. Pp. 4.

Circular No. 24.—Highway Maintenance and Repairs. Pp. 16.

Highway taxation; comparative results of labor and money systems; contract system of maintaining roads.

Circular No. 25.—Brick Paving for Country Roads. Pp. 7, figs. 6.

Circular No. 27.—Cost of Hauling Farm Products in Europe. Pp. 12.

Circular No. 28.—Addresses on Road Improvement in Maine, North Carolina, New York, and Illinois. Pp. 26.

Circular No. 29.—The Forces which Operate to Destroy Roads, with notes on road stones and problems therewith connected. Pp. 14, pls. 4.

Circular No. 30.—Repairs of Macadam Roads. Pp. 14.

Circular No. 31.—Must the Farmer Pay for Good Roads? Pp. 40, figs. 48.

Circular No. 32.—State Aid to Road Building in Minnesota. Pp. 12, figs. 5.

Circular No. 33.—Road Improvement in Governors' Messages. Pp. 14.

OFFICE OF THE SECRETARY.

Circular No. 2.—Protest Against Proposed Legislation Restricting the Experiments of the Department of Agriculture. Pp. 8.

Circular No. 3.—Progress of Southern Agriculture. Pp. 12.

Circular No. 5.—Civil Service in the Department of Agriculture. Pp. 4.

Circular No. 6.—Number, Status, and Compensation of Employees in the Department of Agriculture. Pp. 4.

Circular No. 7.—Possible Influence of Importation of Hawaiian Sugar on Beet-Sugar Production in the United States. Pp. 4.

DIVISION OF SOILS.

Circular No. 3.—The Soils of the Pecos Valley, New Mexico. Pp. 7.

Circular No. 4.—Soils of Salt Lake Valley, Utah. Pp. 11, fig. 1.

Circular No. 5.—Bulk Fermentation of Connecticut Tobacco. Pp. 10.

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DIVISION OF STATISTICS.

Circular No. 1.—Acreage, Production, and Value of Principal Farm Crops in the United States, 1866 to 1895, with Other Data as to Cotton and Wool. Pp. 8.

Circular No. 2.—The Wheat Crop of the World for 1895. Pp. 2.

Circular No. 3.—The Farmers' Interest in Finance. Pp. 15.

Circular No. 4.—The Cotton Crop of 1895. Pp. 15.

Circular No. 5.—Local Taxation as Affecting Farms. Pp. 16.

Circular No. 6.—Cereal Crops of 1896. Pp. 12.

Circular No. 8.—The Cotton Crop of 1896-97. Pp. 4.

Circular No. 10.—The Brazos River (Texas) Flood of June–July, 1899, and its effect on the Agriculture of the Submerged Region. Pp. 8.

Circular No. 11.—The World's Grain Crops in 1899. Pp. 8.

Monthly Crop Circulars.

Issued by the Division of Statistics about the 10th of each month (only one report being issued for the two months of January and February), and containing reports on crop conditions, statistics of crops and farm animals, and notes on crops in foreign countries.

DIVISION OF VEGETABLE PHYSIOLOGY AND PATHOLOGY.

Circular No. 15.—Treatment of Sooty Mold of the Orange. Pp. 4. Circular No. 17.—New Spraying Devices. Pp. 4, figs. 3.

MISCELLANEOUS CIRCULARS.

Circular No. 1.—The Castor Oil Plant. Pp. 4.

Circular No. 2.—The Mississippi River Flood. Pp. 6.

Circular No. 3.—The Mississippi River Flood [second report]. Pp. 4.

Opinions of Scientific Men with Regard to the proposition for a Director-in-Chief of Scientific Bureaus in the Department of Agriculture. Pp. 12.

EXTRACTS.

[Reprinted from the Yearbook for 1894.]

- 2. Education and Research in Agriculture in the United States. Pp. 35.
- 6. Water as a Factor in the Growth of Plants. Pp. 12, figs. 4.
- 7. Mineral Phosphates and Fertilizers. Pp. 16, figs. 2.
- 10. Hawks and Owls from the Standpoint of the Farmer. Pp. 17, pls. 3, figs. 4.
- 11. The Crow Blackbirds and Their Food. Pp. 15, fig. 1.
- 15. Some Practical Suggestions for the Suppression and Prevention of Bovine Tuberculosis. Pp. 13.
- 18. Pure Seed Investigation. Pp. 20, figs. 9.
- 20. Grasses as Sand and Soil Binders. Pp. 16, figs. 11.

- 21. Sketch of the Relationship between American and Eastern Asian Fruits. Pp. 6.
- 24. Best Roads for Farmers and Farming Districts. Pp. 4, figs. 7.
- 25. State Highways in Massachusetts. Pp. 8.
- 26. Improvement of Public Roads in North Carolina. Pp. 8, pls. 2.
- 27. Tobacco Soils of Connecticut and Pennsylvania. Pp. 13, figs. 7.
- 28. Truck Lands of the Atlantic Seaboard. Pp. 15, figs. 3.
- 29. Conditions in Soils in the Arid Region. Pp. 15, figs. 3.
- 30. Weather Conditions of the Crop of 1894. Pp.5, figs. 2.
- 31. Three Articles on Roads. Pp. 22, pls. 2, figs. 7.
 - 1. Best Roads for Farmers and Farming Districts.
 - 2. State Highways in Massachusetts.
 - 3. Improvement of Public Roads in North Carolina.

[Reprinted from the Yearbook for 1895.]

- 34. Testing Seeds at Home. Pp. 9, figs. 3.
- 36. Two Articles on Irrigation and Greenhouses. Pp. 24, figs. 8.

1. Irrigation for the Garden and Greenhouse.

- 2. The Health of Plants in Greenhouses.
- 37. The Meadow Lark and Baltimore Oriole. Pp. 12, figs. 2.
- 38. Hemp Culture. Pp. 8.
- 41. Some Additions to Our Vegetable Dietary. Pp. 10, figs. 9.
- 42. Work of the Department of Agriculture as Illustrated at the Atlanta Exposition. Pp. 20, fig. 1, pls. 3.
- 46. Climate, Soil, and Irrigation in California. Pp. 12, pls. 2, figs. 5.
- 47. Small Fruit Culture for Market. Pp. 12, pl. 1.
- 48. Frosts and Freezes: Effects on Cultivated Plants. Pp. 16, figs. 8.
- 49. Relations of Forests to Farms. Pp. 8, figs. 3.
- 50. Pear Blight: Its Cause and Prevention. Pp. 6.
- 52. Two Hundred Weeds: How to Know and Kill Them. Pp. 18.
- 55. (Part 3.) Pineapple Industry in the United States. Pp. 14, pl. 1, figs. 6.
- 57. Two Articles on Growth and Health of Plants. Pp. 18, figs. 5.

 1. The Principles of Pruning and Care of Wounds in Woody Plants.
 - 2. The Cause and Prevention of Pear Blight.

[Reprinted from the Yearbook for 1896.]

- 60. Timothy in the Prairie Region. Pp. 8, figs. 2.
- 62. The Country Slaughterhouse as a Factor in the Spread of Disease. Pp. 12.
- 63. Some Modern Disinfectants. Pp. 8, fig. 1.
- 65. Extermination of Noxious Animals by Bounties. Pp. 14.
- 66. The Blue Jay and Its Food. Pp. 10, figs. 3.

- 69. The Superior Value of Large and Heavy Seed. Pp. 18, figs. 10.
- 70. Migration of Weeds. Pp. 24, figs. 15.
- 71. Potash and Its Function in Agriculture. Pp. 20.
- 73. The Use of Steam Apparatus for Spraying. Pp. 20, pl. 2, figs. 15.
- 74. Insect Control in California. Pp. 20, figs. 2, pl. 1.
- 75. Asparagus Beetles. Pp. 12, figs. 6.
- 76. The Feeding Value of Corn Stover. Pp. 8.
- 77. Improvement of Our Native Fruits. Pp. 8.
- 78. Agricultural Research and Education in Belgium. Pp. 10.
- 81. Irrigation on the Great Plains. Pp. 30, figs. 9, pls. 2.
- 82. Diseases of Shade and Ornamental Trees. Pp. 18, figs. 5.
- 87. Pruning and Training Grapevines. Pp. 42, figs. 21.
- 88. An Ideal Department of Agriculture and Industries. Pp. 10.

[Reprinted from the Annual Report of 1891.]

89. Grass and Forage Experiment Station at Garden City, Kans. By Dr. J. A. Sewall. Cooperative Branch Stations in the South. By S. M. Tracy. Pp. 12.

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- 90. Division of Agrostology. Pp. 16.
- 91. Lawns and Lawn Making. Pp. 18, pls. 7.
- 93. Bureau of Animal Industry. Pp. 23.
- 94. Utilization of By-Products of the Dairy. Pp. 20.
- 96. Birds That Injure Grain. Pp. 10.
- 102. Office of Experiment Stations. Pp. 9.
- 103. Every Farm an Experiment Station. Pp. 14.
- 104. Popular Education for the Farmer in the United States. Pp. 12.
- 105. The Needs and Requirements of a Control of Feeding Stuffs. Pp. 8.
- 106. The Agricultural Outlook of the Coast Region of Alaska. Pp. 24, pls. 4.
- 107. Foods for Man. Pp. 7.
- 108. Office of Fiber Investigations. Pp. 13.
- 109. Present Status of Flax Culture in the United States. Pp. 16.
- 110. Section of Foreign Markets. Pp. 9.
- 111. Division of Forestry. Pp. 18.
- 112. Trees of the United States Important in Forestry. Pp. 26.
- 118. Office of Road Inquiry. Object Lesson Roads. Pp. 18, pls. 2, fig. 1.
- 120. Some Interesting Soil Problems. Pp. 12.
- 122. Agricultural Production and Prices. Pp. 14.

- 123. Division of Vegetable Physiology and Pathology. Pp. 13.
- 124. Hybrids and Their Utilization in Plant Breeding. Pp. 38, figs. 12, pls. 4.
- 126. Review of Weather and Crop Conditions Season of 1897. Pp. 20.

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- 127. Sand-Binding Grasses. Pp. 18, pls. 3, figs. 11.
- 128. Millets. Pp. 26, pls. 2, figs. 6.
- 129. Forage Plants for Cultivation on Alkali Soils. Pp. 18, figs. 4.
- 130. Cattle Dipping: Experimental and Practical. Pp. 22, figs. 2.
- 131. The Preparation and Use of Tuberculin. Pp. 12, pl. 1.
- 132. The Danger of Introducing Noxious Animals and Birds. Pp. 26, pl. 1, figs. 6.
- 133. Birds as Weed Destroyers. Pp. 14, pl. 1, figs. 7.
- 134. Weeds in Cities and Towns. Pp. 10, figs. 5.
- 135. Can Perfumery Farming Succeed in the United States? Pp. 24, figs. 7.
- 136. Grass Seed and Its Impurities. Pp. 22, pls. 5, figs. 2.
- 137. Utilization of Residues from Beet-Sugar Manufacture in Cattle Feeding. Pp. 10.
- 139. Insects Injurious to Beans and Peas. Pp. 30, figs. 17.
- 140. Some Types of Agricultural Colleges. Pp. 20, pls. 7.
- 141. Some Results of Dietary Studies in the United States. Pp. 16.
- 142. Agricultural Experiments in Alaska. Pp. 12, pls. 3.
- 143. Notes on Some Forest Problems. Pp. 14, pls. 4.
- 144. Work of the Division of Forestry for the Farmer. Pp. 14, pls. 3, figs. 2.
- 145. Pruning of Trees and Other Plants. Pp. 18.
- 146. Utilizing Surplus Fruits. Pp. 10.
- 149. Steel-Track Wagon Roads. Pp. 8, pls. 3, fig. 1.
- 150. Construction of Good Country Roads. Pp. 10, pls. 2.
- 151. Agriculture in Puerto Rico. Pp. 12, pl. 1.
- 154. The Public Domain of the United States. Pp. 32.
- 155. Keeping Goats for Profit. Pp. 20, pls. 2.
- 156. Agricultural Statistics. Pp. 49.
- 157. Pollination of Pomaceous Fruits. Pp. 16, figs. 13.
- 159. Improvement of Plants by Selection. Pp. 24, pls. 2, figs. 3.
- 162. The Hawaiian Islands. Pp. 22.
- 163. A Directory for Farmers. Pp. 19.

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